Storm Data and Unusual Weather Phenomena

July 1997

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
NEW MEXICO Southeast									
Eddy County									
3 E Carlsbad	03	1718MST			0	0			Hail (1.00)
Eddy County									
Black River	03	1820MST			0	0	3K		Thunderstorm Wind
A downburst knocked down 4 utility poles in Black River Village. The poles were left lying to the SSE. A person with a hand held anemometer measured a peak gust of 71 mph near the location of the poles.									
Eddy County									
Loving	03	1830MST			0	0	10K		Thunderstorm Wind (G62)
An open-ended 30x40 foot barn made of poles and corrugated metal was destroyed by microburst winds. The owner of the barn said that the roof was first lifted and then the walls collapsed. The east side of the barn had no wall and with the winds coming in from the east, the air was caught and began the lifting process. A survey of the site found a strongly divergent pattern to damage in the local area.									
Storms developed in the mo untains of central and south-central New Mexico. As the storms moved off the mountains a continuous line developed that extended N-S through Eddy County. Good southeast inflow kept the storms going through evening. Damaging outflow winds occurred in the so uthern half of the county. The maximum temperature at the Carlsbad Airport was 104 degrees with dew points near 50 degrees. During the evening dew points rose into the middle and upper 50s in the region, but was still conducive to downbursting storms.									
Lea County									
3 N Taturn	05	1920MST			0	0			Hail (1.00)
Lea County									
Tatum	05	1925MST			0	0	30K		Thunderstorm Wind
Outflow winds from the forward flank of an HP supercell uprooted trees, blew over or removed roofs from sheds, and downed power poles.									
Lea County									
5 E Me Donald	05	1950MST			0	0		10K	Hail (1.75)
Golfball hail destroyed corn on a dairy farm. Thunderstorms formed in northern Lea County along a synoptic scale outflow boundary that extended from NW-SE. The southern end of a multicell complex became organized and formed into an HP supercell. The mesocyclone passed directly over the McDonald community. At maximum heating temperatures were near 90 degrees with dew points in the upper 50s.									
Eddy County									
Carlsbad Arpt	06	2006MST			0	0			Thunderstorm Wind (G51)
Outflow winds from a collapsing cell west of the airport gusted to 51 kt (59 mph).									
Lea County									
6 E Jal	08	1845MST 2030MST			0	0			Flash Flood
Slow moving storms near Jal produced heavy rains and caused flooding on State Highway 128 east of Jal. The Highway Dept, posted High Water signs, but did not close the highway. The air mass for this day was not one that necessarily suggested flash flooding with surface temperatures in the mid to upper 90s and dew points in the lower 50s, but light and variable winds in the mid levels moved the storms very little.									
Lea County									
1 S Jal	31	1520MST			0	0	5K		Thunderstorm Wind
Downbursting winds from a thunderstorm knocked down 2 utility poles just south of the Jal city limit.									
Eddy County									
16 E Otis	31	1900MST 2100MST			0	0			Flash Flood
Slow-moving thunderstorms dropped flooding rains in eastern Eddy County on State Highway 128. Water was running across the roadway near the 6 mile marker.									
TEXAS West									
TXZ051>052-061062	Martin - Howard - Ector - Midland								
	05	2200CST 2245CST			0	0	40K		High Wind (G67)
Thunderstorms fired in the central New Mexico mountains and were taken into Texas in a northwesterly flow aloft. As the storms traveled through the Texas South Plains a strong meso-high formed and sent an outflow boundary accelerating ahead of the									

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TEXAS West

storms. The boundary arched in such a fashion that the cities of Big Spring, Midland, Odessa and Kermit were being hit simultaneously just after l lpm CDT. This event is being recorded as a "high wind" meso-high event rather than a "thunderstorm wind" event because the storms were so far to the north, away from where the damage occurred. No thunder was reported in these locations.
North of Odessa the wood and sheet metal roof of a church was blown off by the strong winds. Winds at nearby Schlemeyer Airport were clocked at 54 mph. In the city of Odessa a few trees and utility lines were downed as well. Seven miles southeast of Midland winds estimated at 70 mph broke 4-inch diameter tree limbs. Two roofs were blown off trailers near the Fairview community of Howard County and a 77 mph gust was recorded east of Stanton in Martin County.

Dawson County
6 W Lamesa 07 0430CST 0 0 Flash Flood
0530CST
Slow-moving, merging thunderstorm cells dumped 2+ inches over a large portion of western Dawson County. Brief flooding of U.S. Highway 180 occurred west of Lamesa.

Andrews County
Andrews 08 1815CST 0 0 Flash Flood
1930CST
Thunderstorms developed over the city of Andrews and moved very little for over two hours. Three inch rain totals were common across the city. City personnel blocked off some flooded streets in town. After the rains stopped the waters receded very quickly. The air mass for this day was not one that necessarily suggested flash flooding with surface temperatures in the mid to upper 90s and dew points in the lower 50s, but light and variable winds in the mid levels moved the storms very little.

Ector County
7 W Odessa 09 1835CST 0 0 Hail (0.75)
1848CST

Winkler County
Wink 09 1937CST 0 0 Flash Flood
2100CST

Ector County
Odessa 09 1943CST 0 0 Flash Flood
2115CST

Slowly moving and training thunderstorms dropped hail and caused flooding in and near Odessa and in Wink.

Midland County
Midland Arpt 09 2035CST 0 0 7K Thunderstorm Wind
A collapsing thunderstorm near Midland International Airport knocked a large metal storage building located about 1 mile east of the airport off its foundation and peeled back part of the roof. At the airport a 12x3 foot picture window was broken by the wind or debris in the wind. The ASOS at the airport (located between the two damage sites, recorded a 45 knot peak gust.

It was thought that the wind was certainly greater than 45 knots where the building was damaged, but the wind speed at the window was more difficult to assess. The window was in an area amongst buildings that could have made a local channel for the wind or the window could have been structurally weak. The window was the northern-most in a series of eight vertical windows
that face east.

Ector County
3 N Odessa 10 2120CST 0 0 Flash Flood
2215CST
Heavy rains from slow-moving thunderstorms caused brief flooding in parts of Odessa.

Jeff Davis County
5 W Ft Davis 14 1257CST 0 0 Hail (0.75)
A multicell storm over the Davis Mountains dropped dime size hail on a ranch. Dew points near 60 degrees supplied above average low-level moisture for the area to intensify the storms.

Presidio County
Presidio 23 1540CST 0 0 10K Thunderstorm Wind
A thunderstorm with only light to moderate rain had damaging downbursting winds that blew over two carport tops and a utility pole.

Brewster County
Alpine 28 1330CST 0 0 10K Flash Flood
1500CST
Training cells in the Alpine area caused heavy rains and flooding in the city. About 3.5 inches of rain fell over the western half of the city. A van stalled in an underpass and eventually was almost submerged with the roof extending only IS" above the water. Two other vehicles were stranded to water as well.

Reeves County
2 SW Pecos 28 1610CST 0 0 70K Thunderstorm Wind

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A thunderstorm cluster moving over the city of Pecos had a cell that produced a wet macroburst causing widespread minor wind damage. Damaged were an airport hangar, 8 utility poles and 2 transformers, an animal shelter, fences, and roofs of a few businesses.

West Texas

Ector County									
7 ENE Penwell	28	1820CST			0	0	60K		Thunderstorm Wind (G57)

A pulse microburst destroyed 5 trailer homes in a rural development in southwestern Ector County. Three other units received major damage. Most of the trailers were not tied down. Winds in the local area was blowing from SE to NW; the same direction as the storm movement. Since there was minimal damage to some more-substantial structures in the area, wind speeds were only estimated at 60-70 mph. In areas farther east it became evident that there was a downburst pattern, as winds were from the south or southwest.

Presidio County									
Redford	28	1925CST			0	0			Thunderstorm Wind (G52)

Microburst winds measured by an anemometer.

Downbursting potential was high with inverted-V soundings at 00z that evening, but storms were rather limited over the area. Most storms were of a pulse variety with a very short cell life.